BookletChart

Point Sur to San Francisco

(NOAA Chart 18680)



A reduced scale NOAA nautical chart for small boaters. When possible, use the full size NOAA chart for navigation.

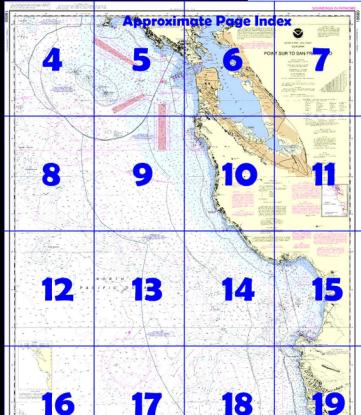
- ☑ Complete, reduced scale nautical chart
- ☑ Print at home for free
- ☑ Convenient size
- ☑ Up to date with all Notices to Mariners

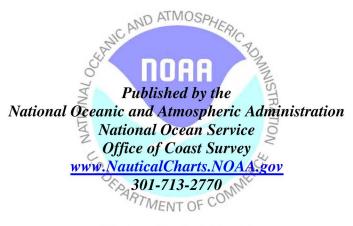
NOAA

C.S. DEDARTMENT OF COMMITTEE

☑ United States Coast Pilot excerpts

✓ Compiled by NOAA, the nation's chartmaker.





What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart $\stackrel{\text{\tiny TM}}{=}$?

This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at http://www.NauticalCharts.NOAA.gov.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.



[Coast Pilot 7, Chapter 6 & 7 excerpts]

(121) **Point Sur,** 121 miles NW of Point Arguello and 96 miles SSE of San Francisco Bay entrance, is a black rocky butte 361 feet high with low sand dunes extending E from it for over 0.5 mile. From N or S, it looks like an island and in clear weather is visible about 25 miles. The buildings on the summit of Point Sur may confuse the stranger. **Point Sur Light** (36°18.4'N., 121°54.1'W.), 250 feet above the water, is shown from a white

tower on a gray stone building on the seaward face of the point. The buildings of a U.S. Naval Facility for oceanographic research are about 0.5 mile E from the light.

(142) **Carmel Bay** is a 2.8-mile-wide open bight between Pinnacle Point and Cypress Point. The beach in front of the city of Carmel is low, but

the land on the S side of the bay is bare and mountainous, and the N side is hilly and heavily wooded.

(157) **Monterey Harbor**, 3 miles SE of Point Pinos, is a compact resort harbor with some commercial activity and fishing. The harbor can accommodate over 800 vessels.

(158) Depths of more than 20 feet are available in the outer harbor and entrance, and 10 to 6 feet in the small-boat basin. There are many sport-fishing landings, and the small-craft basin provides good shelter for over 500 boats. There are four public launch ramps and a 3-ton public hoist in the municipal marina. The boat yard, located just inside the breakwater has a 70-ton travel lift.

(193) **Santa Cruz Light** (36°57.1'N., 122°01.6'W.), 60 feet above the water, is shown from a 39-foot white lantern house on a square brick tower attached to a brick building near the S extremity of the point. A lighted whistle buoy is 1.1 miles SE of the light.

(210) **Sand Hill Bluff,** 6.5 miles W of Santa Cruz Light, is composed of sandstone cliffs about 50 feet high with a rounding irregular hillock of white sand near the edge of the cliffs; this hillock is white on the NW side, and is covered with brush and grass on the SE side. Neither this bluff nor Needle Rock Point is a good landmark.

(215) **Point Ano Nuevo,** 18 miles NW of Point Santa Cruz, is formed by sand dunes 20 to 100 feet high. A low black rocky islet is 0.3 mile off the point. Foul ground extends NW and SE from the islet.

(217) The 5-mile coast between Point Ano Nuevo and Pigeon Point is low and rocky. **Pigeon Point,** 22.5 miles NW of Point Santa Cruz, is 50 feet high and rises in a gentle slope to the coastal hills. Several moderately large detached rocks extend 350 yards SW. Pigeon Point was named from the wreck at this place of the clipper ship CARRIER PIGEON.

(218) **Pigeon Point Light** (37°10.9'N., 122°23.6'W.), 148 feet above the water, is shown from a 115-foot white conical tower on the end of the point. A radiobeacon is at the station. The light cannot be seen in the bight E of a line joining Pigeon Point and Pillar Point, 20 miles to the N. The light station buildings on Pigeon Point are white with red roofs. A group of farm buildings is about 0.5 mile E. A row of trees, conspicuous against a background of barren hills is about 500 yards NE of the light. (219) From Pigeon Point for 4 miles to **Pescadero Point**, the coast is nearly straight and is composed of reddish cliffs with numerous outlying submerged and visible rocks.

(222) **Pillar Point**, 18 miles S of San Francisco entrance, is the S extremity of a 2.5-mile low ridge. Several black rocks extend over 300-yards S of the point; from N these appear as three or four, but from S as only one. **Half Moon Bay** comprises the bight from **Miramontes Point** on the S to Pillar Point on the N.

(234) **Point Montara Light** (37°32.2'N., 122°31.2'W.), 70 feet above the water, is shown from a 30-foot white conical tower on the point. A group of white buildings with red roofs is prominent on the point.

(1) San Francisco Bay, the largest harbor on the Pacific coast of the United States, is more properly described as a series of connecting bays and harbors of which San Francisco Bay proper, San Pablo Bay, and Suisun Bay are the largest. Depths of 29 to 40 feet are available for deepdraft vessels to San Francisco, Oakland, Alameda, Richmond, and Redwood City in San Francisco Bay proper; to Stockton on the San Joaquin River; and to Sacramento through the lower Sacramento River and a deepwater channel.

(67) **Point Reyes**, 18 miles N of Farallon Light, is a bold, dark, rocky headland 612 feet high at the W and higher extremity of a ridge running in an E direction for 3 miles. It is an excellent radar target in thick weather. There is lowland N of the point, so that from N and S, and from seaward in hazy weather, it usually appears as an island. The point is visible for over 25 miles.

(68) **Point Reyes Light** (37°59.7'N., 123°01.4'W.), 265 feet above the water, is shown from a platform on top of a square building on the W extremity of the point. A fog signal is at the light. Two rocks, 275 yards W of the light, are covered about 3 feet and break in a moderate swell.

Corrected through NM Jun. 11/05 Corrected through LNM Jun. 7/05

IMO - adopted Recommended Tracks for vessels 300 gross tons and above (except those carrying hazardous cargo in bulk or crude oil).

NOTE I

IMO - adopted Recommended Tracks for vessels carrying hazardous cargo in bulk (including ore concentrates, explosives, munitions, chemicals, liquefied gases, refined products, distillates or other non-persistent cargo.) Vessels using these tracks should use the Western TSS when entering or leaving San Francisco.

SEA OTTER REUGE

The State of California Fish and Game Code prohibits the use of bows and firearms and the rapping of birds and mammals in the California Sea Otter Game Refuge.

RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

POLLUTION REPORTS

REPORTS
Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

HORIZONTAL DATUM

The horizontal reference datum of this chart s North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.237" southward and 3.876" westward to agree with this chart.

AIDS TO NAVIGATION

Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

The San Francisco Bay Vessel Traffic Service is not shown on this chart. See Charts 18645 and 18649.

WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

NOAA WEATHER RADIO BROADCASTS

The NOAA Weather Radio stations listed below provide continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

 Mt. Pise, CA
 KHB-49
 162.40 MHz WX2

 Mt. Umunhum, CA
 KEC-49
 162.55 MHz WX1

 Mt. Umunhum, CA
 WWF-64
 162.45 MHz WX5

Table of Selected Chart Notes

MAIN SHIP CHANNEL

The project depth is 55 feet. For controlling depth see chart 18649.

CAUTION

Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117. Radio direction-finder bearings to commercial

broadcasting stations are subject to error and should be used with caution.

Station positions are shown thus:

O(Accurate location) o(Approximate location)

NOTE G
CHEMICAL MUNITIONS DUMPING
AREA-RESTRICTION
Site was formerly used or designated for U.S. chemical
munitions dumping. Such use has been discontinued.
Designation of such area in no way constitutes authority

OUNTAIN O

LORAN-C

GENERAL EXPLANATION

М									Master
W									Secondary
Χ									Secondary
Υ									Secondary
Z									Secondary

EXAMPLE: 9940-X

RATES ON THIS CHART

Loran-C correction tables published by the National Loran-C correction tables published by the National Geospatial-Intelligence Agency or others should not be used with this chart. The lines of position shown have been adjusted based on theoretically determined overland signal propa-gation delays. They have not been verified by comparison with survey data. Every effort has been made to meet the Vi nautical mile accuracy oriteria established by the U.S. Coast Guard. Mariners are cautioned not to rely solely on the lettines in insprove waters. the lattices in inshore waters.

PRECAUTIONARY AREA

Traffic within the Precautionary Area may consist of vessels making the transition between the Main Ship Channel and one of the established traffic lanes. Mariners Channel and one of the established traffic lanes, Manners are advised to exercise extreme caution when navigating within this area. The normal cruising area of the pilot vessel is indicated "PILOT AREA." When passing Traffic Lane Lighted Buoys "S", "W", or "N", inbound vessels should contact the pilot boat on channel 13 for boarding instructions.

NOTE A

NOTE A

Navigation regulations are published in Chapter 2, U.S.
Coast Pilot 7. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 11th Coast Guard District in Alameda, California or at the Office of the District Engineer, Corps of Engineers in San Francisco, California.

Refer to charted regulation section numbers.

TRAFFIC SEPARATION SCHEME

One-way traffic lanes overprinted on this chart are recommended for use by all vessels traveling between the points involved. They have been designed to aid in the prevention of collisions at the approaches to San Francisco Bay but are not intended in any way to supersede or after the applicable Rules of the Road. Separation zones are

COLREGS: International Regulations for Preventing Collisions at Sea, 1972.

Demarcation lines are shown thus: — — — —

SUPPLEMENTAL INFORMATION

Consult U.S. Coast Pilot 7 for important supplemental information.

Additional information can be obtained at nauticalcharts.noaa.gov

SOURCE DIAGRAM

The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, <u>United States Coast Pilot</u>.

HEIGHTS

Elevations of rocks, bridges, landmarks, and lights are in feet and refer to Mean High Water. Contour and summit elevation values are in feet and refer to Mean Sea Level.

AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, and U.S. Coast Guard.

VESSEL TRANSITING

The U.S. Coast Guard and the Pacific States/British Columbia Oil Spill Task Force endorse a system of voluntary measures and minimum distances from shore for certain commercial vessels transiting along the coast anywhere between Cook Intel, Alaska and San Diego, California. See U.S.Coast Pilot 7, Chapter 3 for details.

CAUTION

This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner.

NOTE S

Additional information concerning the regulations and requirements for use of the sites may be obtained from the Environmental Protection Agency (EPA). See U.S. Coast Pilots appendix for addresses of EPA offices. Dumping subsequent to the survey dates may have reduced the depths shown.

This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions, or comments for improving this chart to the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.

NOTE X

NOTE X
Within the 12-nautical mile Territorial Sea, established by Presidential Proclamation, some Federal laws apply. The Three Nautical Mile Line, previously identified as the outer limit of the territorial sea, is retained as it continues to depict the jurisdictional limit of the other laws. The P-nautical mile Natural Resource Boundary of the Gulf coast of Florida, Texas, and Puerto Rico, and the Three Nautical Mile Line elsewhere remain in most cases the inner limit of Federal fisheries jurisdiction and the outer limit of the jurisdiction of the states. The 24-nautical mile Contiguous Zone and the 200-nautical mile Exclusive Economic Zone were established by Presidential Proclamation. Unless fixed by treaty or the U.S. Supreme Court, these maritime limits are subject to modification.

ABBREVIATIONS (For complete list of Symbols and Abbreviations, see Chart No. 1.)

Aids to Navigation (lights a	re white unless ot	nerwise indicated):				
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B black	Iso isoph	ase	Oc occulting	s seconds		
Bn beacon	LT HO liq	ghthouse	Or orange	SEC sector		
C can	M nautica	al mile	Osc oscillating	St M statute miles		
DIA diaphone	m minute	IS .	Q quick	VQ very quick		
F fixed	MICRO T	R microwave tower	R red	W white		
FI flashing	Mkr mark	er	Ra Ref radar reflector	WHIS whistle		
	Mo mors	e code	R Bn radiobeacon	Y yellow		
Bottom characteristics:						
Blds boulders	Co coral	gy gray	Ovs oysters	so soft		
bk broken	G gravel	h hard	Rk rock	Sh shells		
Cy clay	Grs grass	M mud	S sand	sy sticky		
Miscellaneous:						
AUTH authorized	Obstn	obstruction	PD position doubtful	Subm submerged		
ED existence doubt	ul PA pos	ition approximate	Rep reported			
21, Wreck, rock, ob (2) Rocks that cove			depth indicated. bove datum of soundings			

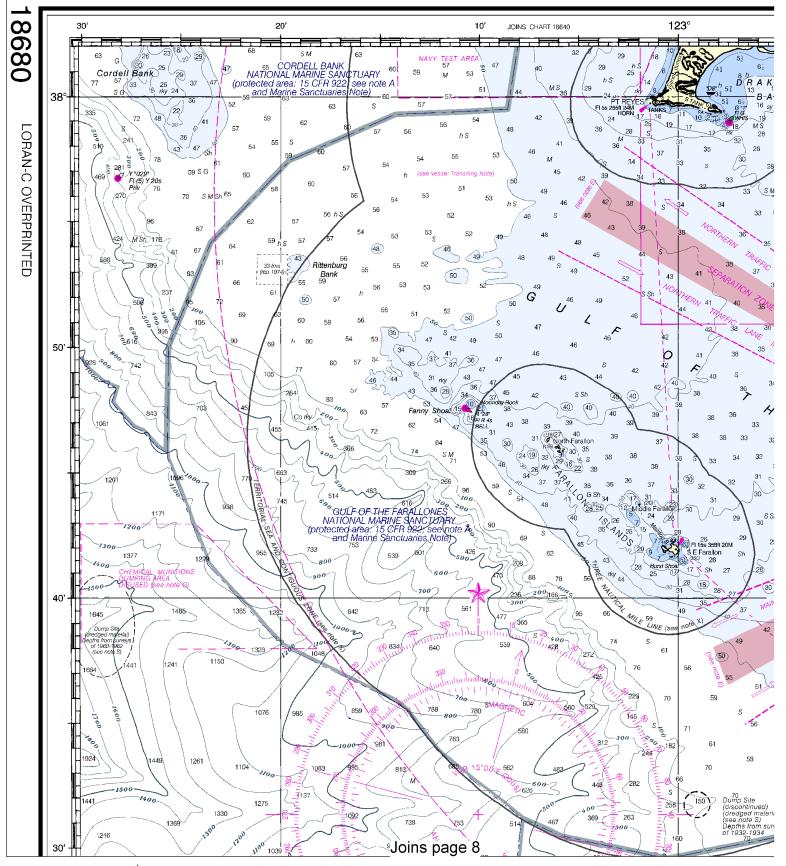
PRINT-ON-DEMAND CHARTS

This chart is available in a version updated weekly by NOAA for Notices to Mariners and critical corrections. Charts are printed when ordered using Print-on-Demand technology. New Editions are available 5-8 weeks before their release as traditional NOAA charts. Ask your chart agent about Print-on-Demand charts.

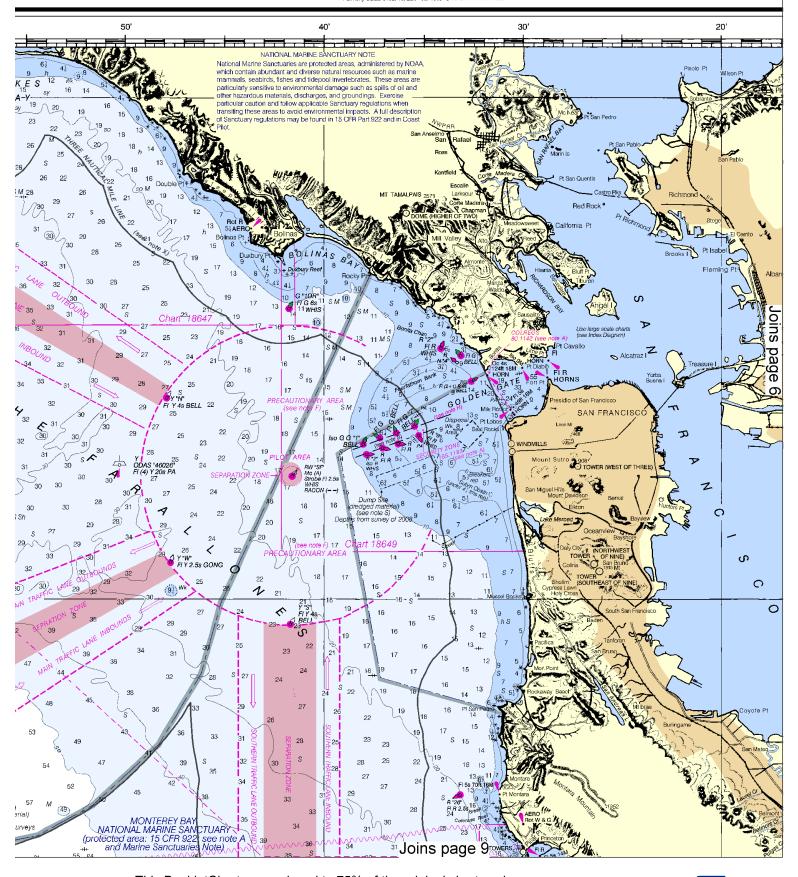
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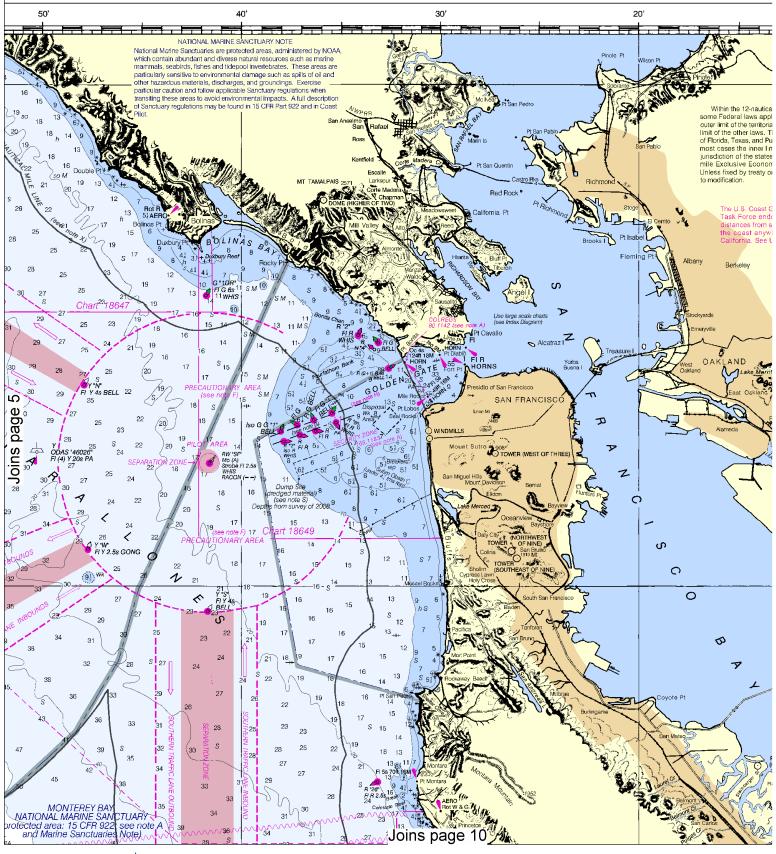
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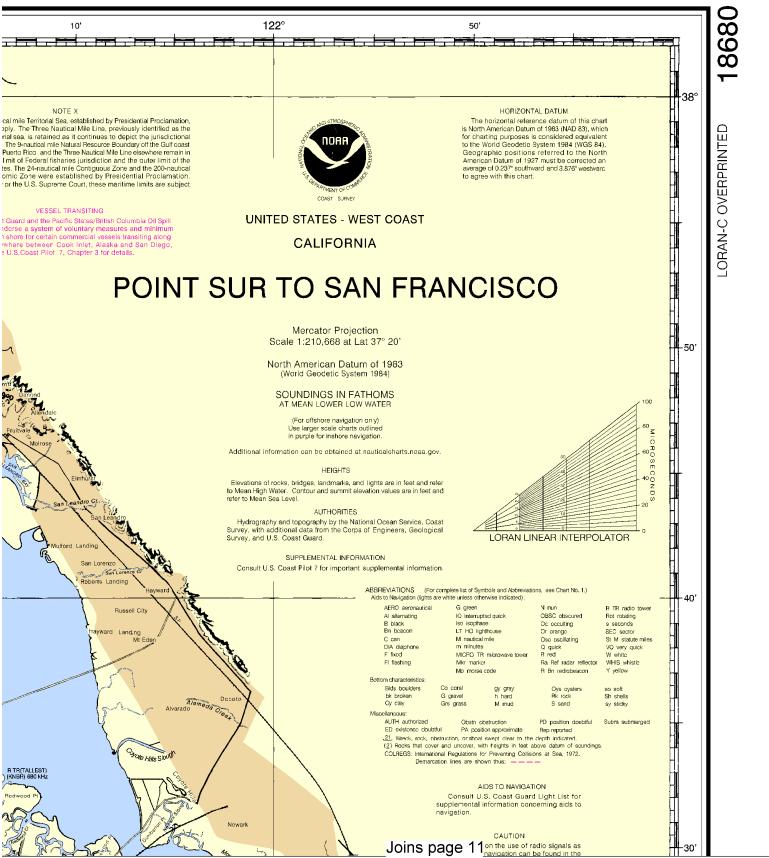
This BookletChart was reduced to 75% of the original chart scale. The new scale is 1:280891. Barscales have also been reduced and are accurate when used to measure distances in this BookletChart.







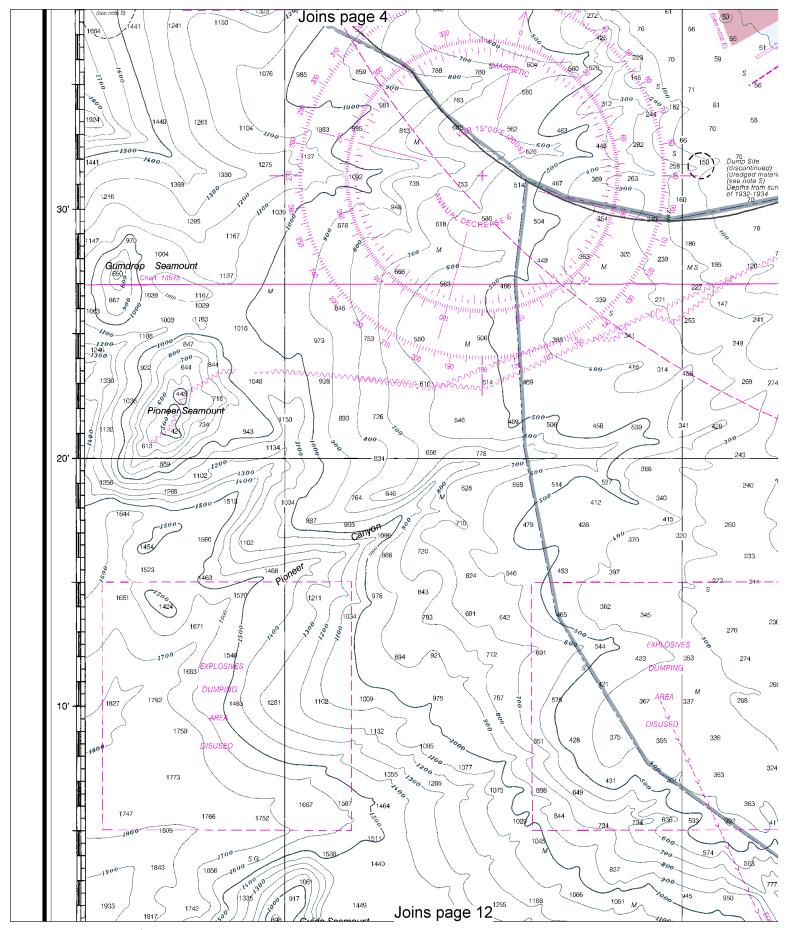
SOUNDINGS IN FATHOMS



This BookletChart has been updated with: Coast Guard Local Notice To Mariners: 0510 2/2/2010, NGA Weekly Notice to Mariners: 0910 2/27/2010,

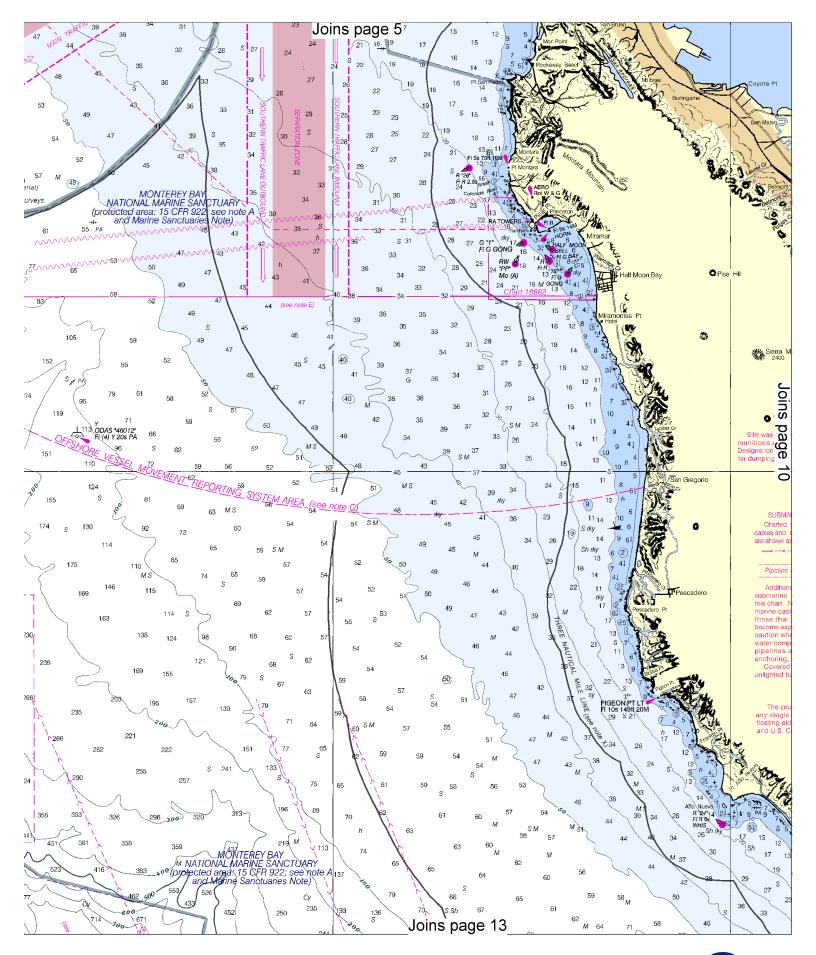
Canadian Coast Guard Notice to Mariners: n/a.



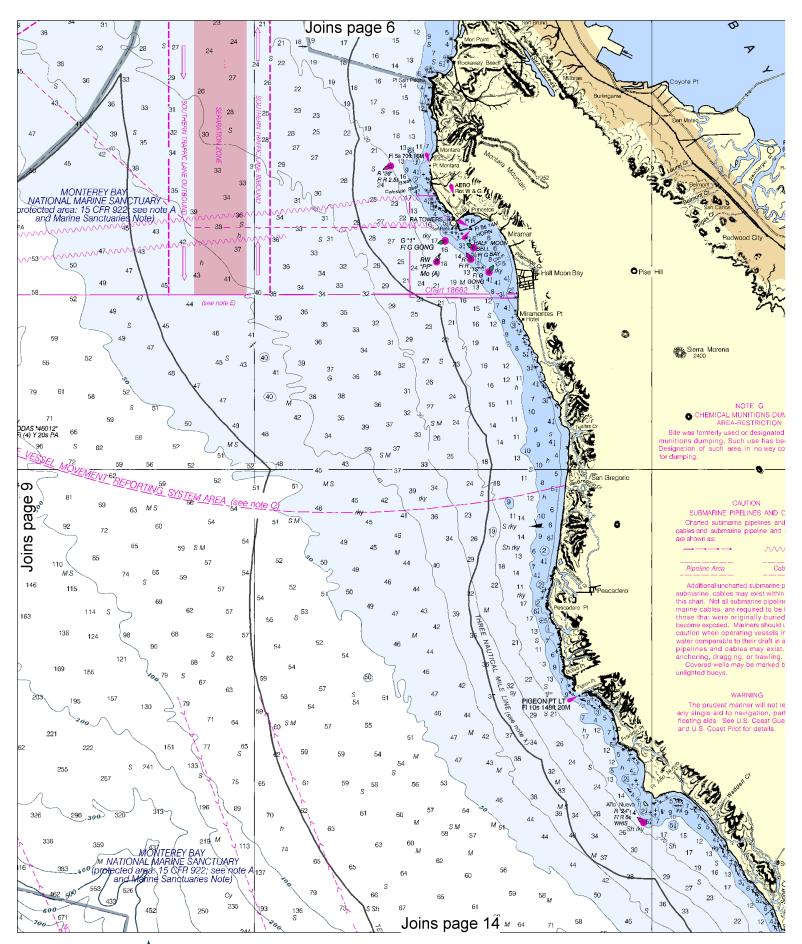






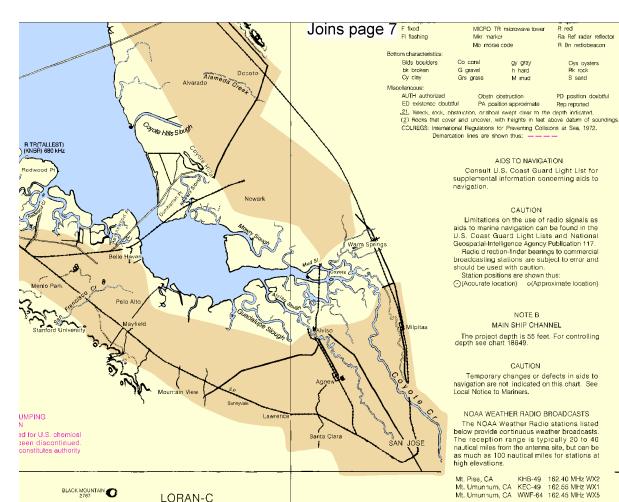












LORAN-C

GENERAL EXPLANATION

LORAN-C FREQUENCY.

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Master Secondary Secondary Secondary

EXAMPLE: 9940-X

CABLES

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RATES ON THIS CHART

Loran-C correction tables published by the National Geospatial-Intelligence Agency or others should not be used with this chart. The lines of position shown have been adjusted based on theoretically determined overland signal propa-gation delays. They have not been ver fied by comparison with survey data. Every effort has been made to meet the A nautical mile accuracy criteria established by the U.S. Coast Guard. Mariners are cautioned not to rely solely on the lattices in inshore waters.

POLLUTION REPORTS

Report all spills of oil and hazardous sub-stances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

Regulations for Ocean Dumping Sites are contained in 40 CFR, Parts 220-229. Additional information concerning the regulations and requirements for use of the sites may be obtained from the Environmental Protection Agency (EPA). See U.S. Coast Pilots appendix for addresses of EPA offices. Dumping subsequent to the survey dates may have reduced the depths shown.

The San Francisco Bay Vessel Traffic Service

NOTE F TRAFFIC SEPARATION SCHEME

One-way traffic lanes overprinted on this chart are recommended for use by all vessels traveling between the points involved. They have been designed to aid in the prevention of collisions at the approaches to San Francisco prevention of collisions at the approaches to San Francisco Bay but are not intended in any way to supersede or alter the applicable Rules of the Road. Separation zones are intended to separate inbound and outbound traffic and to be free of ship traffic. Separation zones should not be used except for crossing purposes. Mariners are requested to stay outside the circular separation zone centered on the San Francisco Approach Lighted Horn Buoy SF. When crossing traffic lanes and separation zones use extreme equation.

NOTE F PRECAUTIONARY AREA

Traffic within the Precautionary Area may consist of vessels making the transition between the Main Ship Channel and one of the established traffic lanes. Mariners are advised to exercise extreme caution when navigating within this area. The normal cruising area of the pilot vessel is indicated 'PILOT AREA.' When passing Traffic Lane Lighted Budys 'S', 'W', or 'N', inbound vessels should contact the pilot boat on channel 13 for boarding instructions.

Mount Jmurhum



Loma Prieta 3791

MICRO TR microwave tower

Obstn obstruction

gy gray

M mud

AIDS TO NAVIGATION

CAUTION

NOTE B MAIN SHIP CHANNEL

CAUTION

Mkr marker

Ra Ref radar reflector

Oys oysters Rk rock S sand

PD position doubtful

WHIS whistle

sy sticky

Subm submerged

30

20'

10

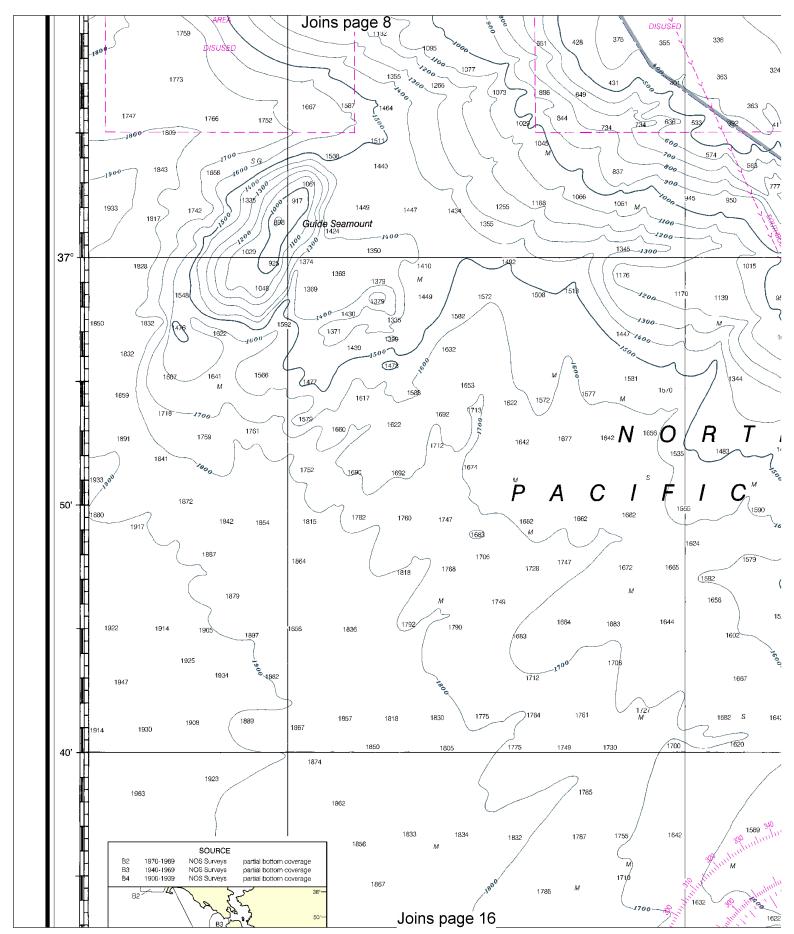
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IMO - adopted Recommended Track for vessels carrying hazardous cargo ibulk (including or concentrates, explosive munitions, chemicals, liquetied gase refined products, distillates or other non persistent cargo). Vessels using these track should use the Western TSS when entering cleaning San Francisco.

NOTE J

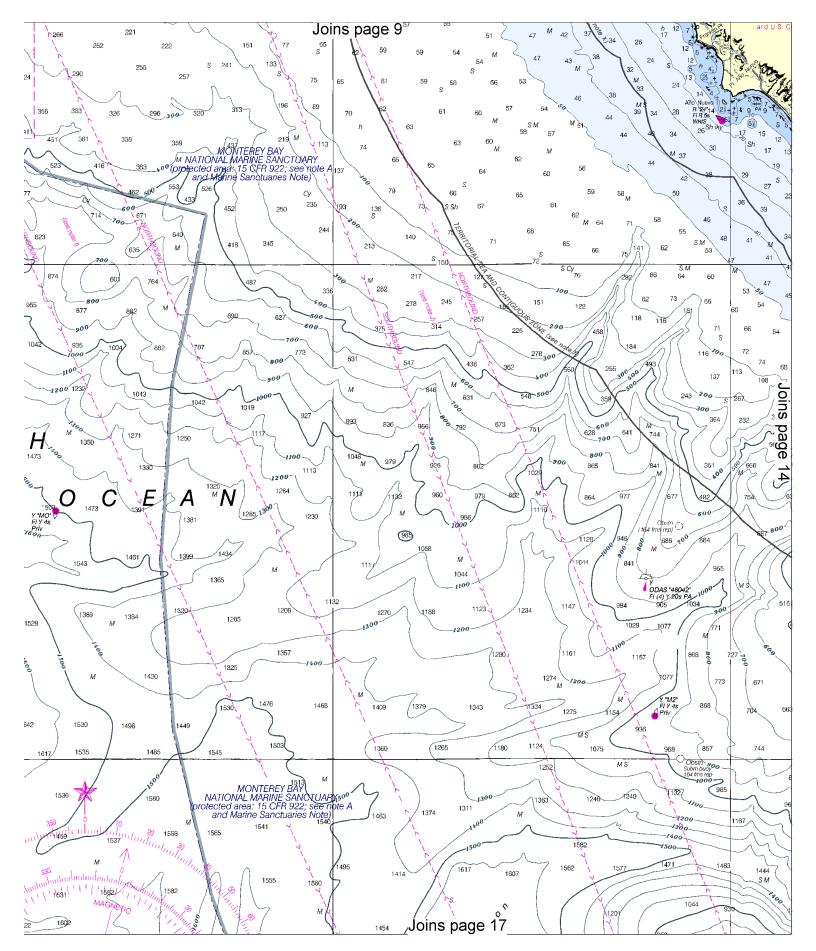
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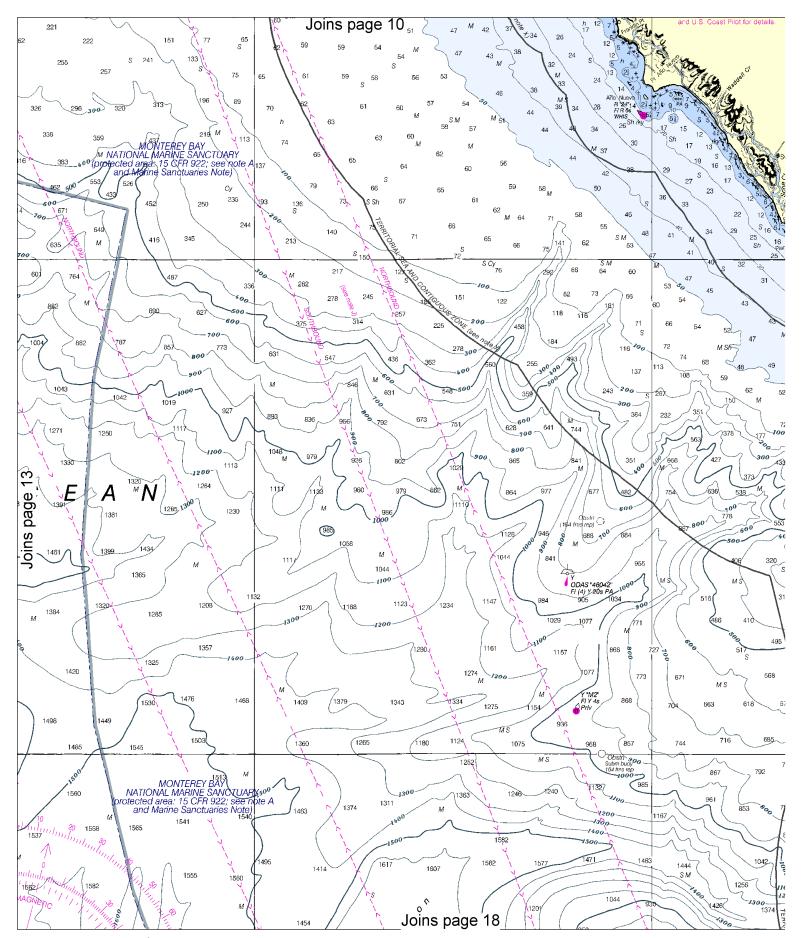
The U.S. Coast Guard operates an Offshore Vessel Movement Reporting System (OVMRS) covering the seaward approaches to San Francisco Bay. All commercial vessels over 300 gross tons and all tugs with lows are requested to contact Vessel Traffic Service San Francisco on VHF-FM channel 12 (156.60 MHz) when entering this area. All vessels in the area are encouraged to listen on channe 12 at fiftee and forty-five minutes past each hour forcadcast reports of known shipping traffic in the area. Additional information on the OWARS is published in Coast Pilot 7 and Information concerning predictions are strongly considerable from the VICE. specific operating procedures is available from the VTS.





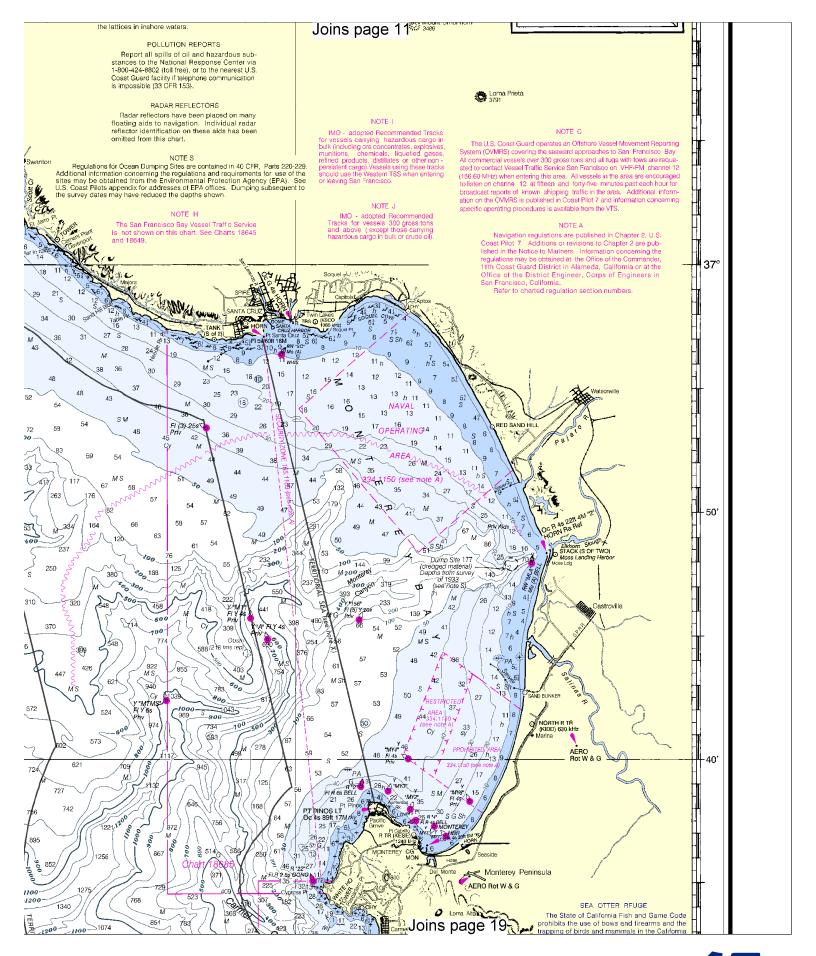


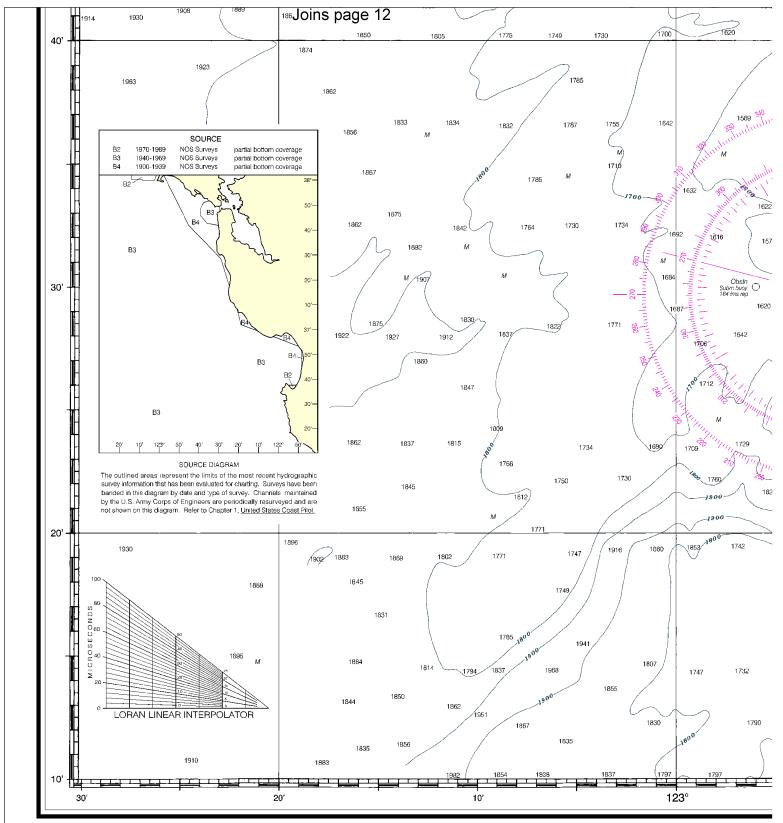












31st Ed., Jun. / 05 Corn Corn Corn

Corrected through NM Jun. 11/05 Corrected through LNM Jun. 7/05

LORAN-C OVERPRINTED

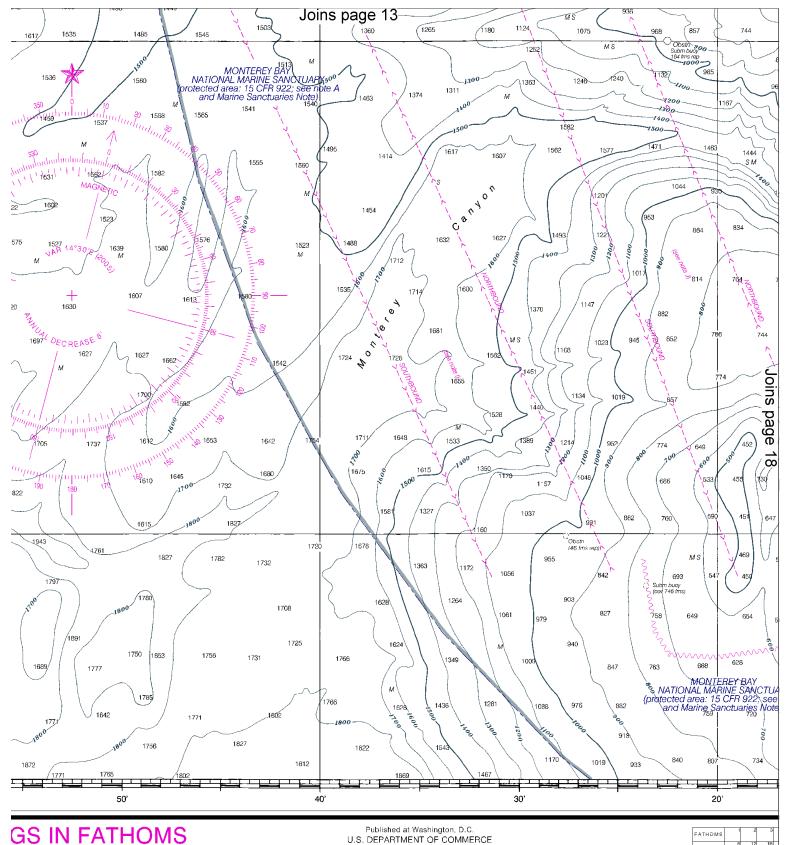
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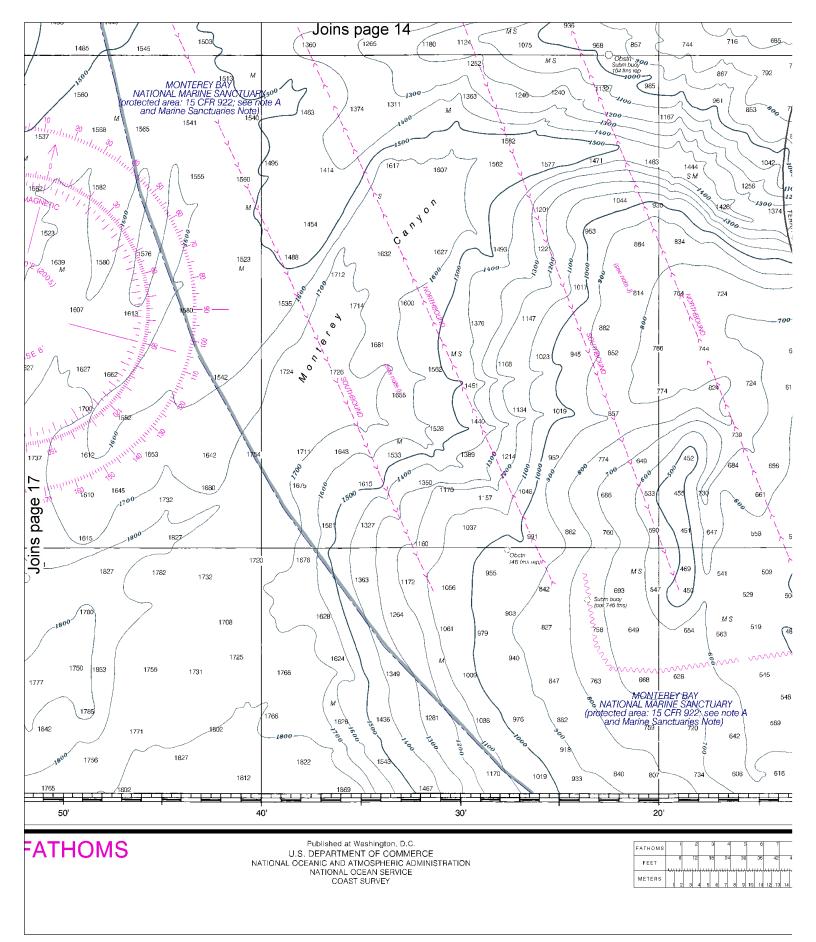






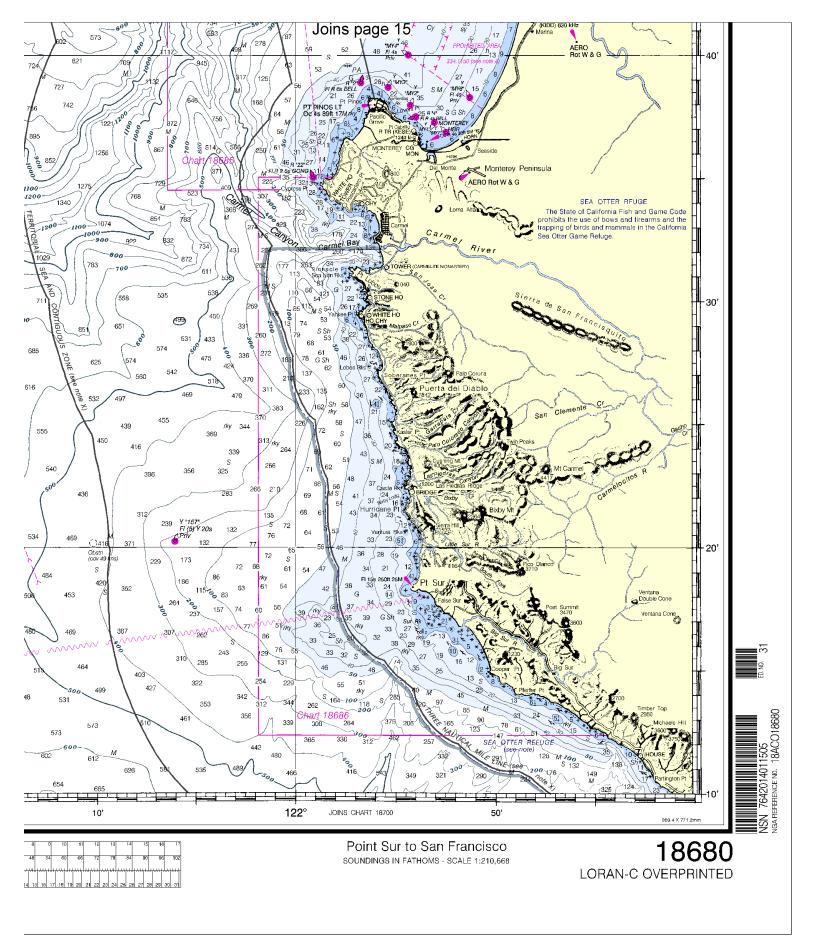
Published at Washington, D.C.
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE
COAST SURVEY

FATHOMS		1		2		3
FEET		6		12	1	18
METERS	1	2	3	4	5	6









EMERGENCY INFORMATION

VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.

Channel 9 – Communications between boats and ship-to-coast.

Channel 13 – Navigation purposes at bridges, locks, and harbors.

Channel 16 – Emergency, distress and safety calls

to Coast Guard and others, and to initiate calls to other vessels. Contact the other vessel, agree to another channel, and then switch.

Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.

Channels 68, 69, 71, 72 & 78A – Recreational boat channels.

Distress Call Procedures

- 1. Make sure radio is on.
- 2. Select Channel 16.
- 3. Press/Hold the transmit button.
- 4. Clearly say: "MAYDAY, MAYDAY, MAYDAY."
- Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
- 6. Release transmit button.
- Wait for 10 seconds If no response Repeat MAYDAY Call.

HAVE ALL PERSONS PUT ON LIFE JACKETS!!

Mobile Phones – Call 911 for water rescue.

Coast Guard Search & Rescue – 510-437-3700 Coast Guard San Francisco – 415-399-3479 Commercial Vessel Assistance – 1-800-367-8222

<u>NOAA Weather Radio</u> – 162.400 MHz, 162.425 MHz, 162.450 MHz, 162.475 MHz, 162.500 MHz, 162.525 MHz, 162.550 MHz.

<u>Getting and Giving Help</u> – Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.



NOAA CHARTING PUBLICATIONS

Official NOAA Nautical Charts – NOAA surveys and charts the national and territorial waters of the U.S, including the Great Lakes. We produce over 1,000 traditional nautical charts covering 3.4 million square nautical miles. Carriage of official NOAA charts is mandatory on the commercial ships that carry our commerce. They are used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters. NOAA charts are available from official chart agents listed at: www.NauticalCharts.NOAA.gov.

Official Print-on-Demand Nautical Charts — These full-scale NOAA charts are updated weekly by NOAA for all Notice to Mariner corrections. They have additional information added in the margin to supplement the chart. Print-on-Demand charts meet all federal chart carriage regulations for charts and updating. Produced under a public/private partnership between NOAA and OceanGrafix, LLC, suppliers of these premium charts are listed at www.OceanGrafix.com.

Official Electronic Navigational Charts (NOAA ENCs®) –

ENCs are digital files of each chart's features and their attributes for use in computer-based navigation systems. ENCs comply with standards of the International Hydrographic Organization. ENCs and their updates are available for free from NOAA at www.NauticalCharts.NOAA.gov.

Official Raster Navigational Charts (NOAA RNCs[™]) –

RNCs are geo-referenced digital pictures of NOAA's charts that are suitable for use in computer-based navigation systems. RNCs comply with standards of the International Hydrographic Organization. RNCs and their updates are available for free from NOAA at www.NauticalCharts.NOAA.gov.

Official BookletCharts[™] – BookletCharts[™] are reduced scale NOAA charts organized in page-sized pieces. The "Home Edition" can be downloaded from NOAA for free and printed. The Internet address is www.NauticalCharts.gov/bookletcharts.

Official PocketChartsTM – PocketChartsTM are for beginning recreational boaters to use for planning and locating, but not for real navigation. Measuring a convenient 13" by 19", they have a 1/3 scale chart on one side, and safety, boating, and educational information on the reverse. They can be purchased at retail outlets and on the Internet.

Official U.S. Coast Pilot® – The Coast Pilots are 9 text volumes containing information important to navigators such as channel descriptions, port facilities, anchorages, bridge and cable clearances, currents, prominent features, weather, dangers, and Federal Regulations. They supplement the charts and are available from NOAA chart agents or may be downloaded for free at www.NauticalCharts.NOAA.gov.

Official On-Line Chart Viewer – All NOAA nautical charts are viewable here on-line using any Internet browser. Each chart is up-to-date with the most recent Notices to Mariners. Use these on-line charts as a ready reference or planning tool. The Internet address is www.NauticalCharts.gov/viewer.

Official Nautical Chart Catalogs – Large format, regional catalogs are available for free from official chart agents. Page size, state catalogs are posted on the Internet and can be printed at home for free. Go to http://NauticalCharts.NOAA.gov/mcd/ccatalogs.htm.

Internet Sites: www.Noa.gov, <a href="